

We Claim:

1. A contact assembly comprising:
a housing and a stalk, the stalk being located within the housing and able
5 to move laterally therein;

the stalk having a shaft portion, a tip portion at an end of the shaft portion,
and a contact arm extending from the shaft portion, the tip portion being adapted
to engage an incline surface and the contact arm having a contact thereon adapted
to engage a printed circuit board;
10 wherein as the housing is rotated the stalk moves both vertically and
laterally so that the contact comes into engagement with the printed circuit board
and slidably moves along the surface of the printed circuit board.

2. The contact assembly of claim 1, wherein:
15 the tip portion extends out of the housing to engage the incline surface,
and as the housing is rotated, the tip portion is urged laterally into the housing by
the inclined surface.

3. The contact assembly of claim 1, wherein:
20 the housing includes a slot through which the contact arm extends so that
the shaft portion of the stalk may move laterally relative to the housing.

4. The contact assembly of claim 1, wherein:
a spring abuts against the tip portion to urge the tip portion into
25 engagement with the inclined surface.

5. The contact assembly of claim 4, wherein:
the shaft portion includes a hollowed out interior and the spring is placed
within the hollowed out interior of the shaft portion.
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6. The contact assembly of claim 1, wherein:
the contacts are resiliently fixed to the contact arm so that as the contact is brought into engagement with the printed circuit board and the contact arm is rotated into closer proximity to the printed circuit board, the contact is able to flex
5 and remain on the surface of the printed circuit board.

7. The contact assembly of claim 1, further comprising:
a boss located on or in close proximity to the housing, the boss being adapted to cooperate with a spring to urge the contact off the printed circuit board
10 so that the default position of the contact assembly is disengaged from the printed circuit board.

8. A contact assembly for use with a vehicle steering wheel,
comprising:
15 a lever and a housing located at an end of the lever, the housing having a stalk located therein, the stalk being able to move laterally within the housing and having a tip portion extending out of the housing in a first direction and a control arm extending out of the housing in a second direction;
the tip portion engaging an inclined surface and the contact arm having a
20 contact thereon engaging a printed circuit board;
wherein as the lever is actuated, the tip portion is moved along the inclined surface so that the contact engages the printed circuit board, and the inclined surface urges the contacts to move over the surface of the printed circuit board.

9. The contact assembly of claim 8, wherein:
the housing includes a slot through which the contact arm extends so that
25 the contact arm may move laterally relative to the housing.

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10. The contact assembly of claim 8, wherein:
a spring abuts against the tip portion to urge the tip portion into engagement with the inclined surface.

5 11. The contact assembly of claim 10, wherein:
the stalk further comprises a shaft portion that includes a hollowed out interior and the spring is placed within the hollowed out interior of the shaft portion in contact with the tip portion.

10 12. The contact assembly of claim 8, wherein:
the contacts are resiliently fixed to the contact arm so that as the contact is brought into engagement with the printed circuit board and the contact arm is rotated into closer proximity to the printed circuit board, the contact is able to flex and remain on the surface of the printed circuit board.

15 13. The contact assembly of claim 8, further comprising:
a boss located on the lever, the boss being adapted to cooperate with a spring to urge the contact assembly into a default position where the contact is disengaged from the printed circuit board.

20 14. The contact assembly of claim 8, wherein the inclined surface has varying slope.

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